



July 18, 2005

4731.01

Humboldt County Department of Health and Human Services
Division of Environmental Health
100 H Street, Suite 100
Eureka, California 95501

Attention: Mr. Mark Verhey

Subject: Groundwater Monitoring Report; Second Quarter 2005
Varsity Ice Cream; 1732 Second Street, Eureka, California
LOP No. 12688

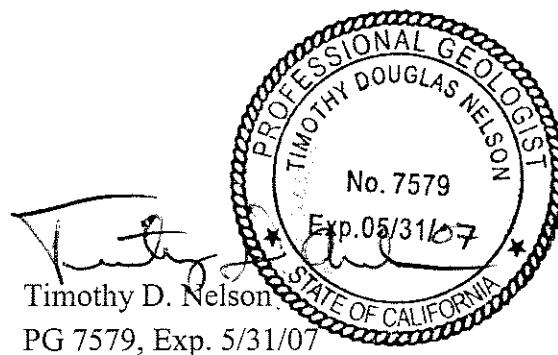
Dear Mr. Verhey:

LACO ASSOCIATES (LACO) is pleased to present to the Humboldt County Division of Environmental Health (HCDEH) the results of groundwater monitoring for the second quarter of 2005 for the above-referenced site. This report has been prepared on behalf of Jim Ely.

Please call (707) 443-5054, if you have any questions or concerns.

Sincerely,
LACO ASSOCIATES

Amy M. Thomson
Staff Geologist



cc: Jim Ely, Varsity Ice Cream

Attachments

P:\4000\4731 Varsity Ice Cream\Submittals\Monitoring Reports\2005\2 Q 2005\4731 2Q05 GMR.doc

GROUNDWATER MONITORING REPORT

SECOND QUARTER 2005

Varsity Ice Cream; 1732 Second Street, Eureka, California
LOP No. 12688; LACO Project No. 4731.01

INTRODUCTION

Field activities were conducted in accordance with generally accepted practices and standard operating procedures on May 4, 2005, at the Varsity Ice Cream facility (hereafter referred to as the site). Please refer to Table A below for the current groundwater monitoring sampling regime and to the *Standard Operating Procedures* on-file at your office for sampling details. A location and site map are provided as Figures 1 and 2, respectively. Field forms are included as Attachment 2.

SITE CHRONOLOGY

- 1950 to 1970 The site was owned and operated by The Borden Company.
- 1968 A 550 gallon underground storage tank (UST) was last used on-site.
- 1970 to 1977 The site operated as Knudsen Dairy Products.
- 1978 Varsity Ice Cream took over operations at the site.
- Nov. 1998 North Coast Environmental Construction (NEC) removed the 550-gallon UST and approximately 20 cubic yards of contaminated soil.
- June 1999 Installation of four hydropunch borings and discovery of groundwater contamination occurred.
- Jan. 2001 Installation of four temporary soil borings and three monitoring wells occurred.
- May 2001 LACO submitted *Subsurface Investigation Status Report Report of Findings: Boring and Monitoring Well Installation* to HCDEH.
- Oct. 2002 Installation of two borings (B5 and B6) using direct push technology occurred.
- Jan. 2004 Destruction of monitoring well MW3 by the pressure-grouting method occurred.
- Mar. 2004 Ten borings were installed at the site. Borings B7 and B9 were placed in the sewer trench, B11 through B14 were placed in the immediate vicinity of the former tank cavity, and B10, B15, and B16 were installed in the former pump dispenser.

- Nov. 2004 Excavation and removal of approximately 1,340 square feet of contaminated soil from the site occurred.
- Dec. 2004 Monitoring well MW4 was installed and developed.

Table A: Sampling Details for May 4, 2005							
WELL	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS		SAMPLING SCHEDULE
					ORGANICS	INORGANICS	
MW1	5-15	7.32			Not Sampled		
MW2	5-15	6.9			Not Sampled		
MW3					Destroyed		
MW4	5-15	7.20	DHP	ORP, DO	TPHg, TPHd, TPImo, BTEX, MTBE, TBA, DIPE, ETBE, TAME	None	Quarterly

HYDROGEOLOGY

The Varsity Ice Cream facility is located on a relatively flat marine terrace approximately 35 feet above sea level, on the edge of Humboldt Bay. The monitoring wells at this site have screen intervals of 5 to 15 feet bgs, within a poorly graded sand unit which is overlain by a dark colored silty unit.

The hydraulic gradient for the May 4, 2005, sampling event was calculated using the three-point method in the area defined by monitoring wells MW1, MW2, and MW4. These monitoring wells were chosen for the purpose of consistency with previous calculations.

- The hydraulic gradient on May 4, 2005, was calculated as 1.9 percent with a bearing of N3°E (Figure 3).

This gradient is similar to historic gradients at this site (Table 1). Current and historic hydraulic head measurements for the monitoring wells are summarized in Table 2. A key to the table abbreviations is included as Attachment 1.

LABORATORY ANALYTICAL RESULTS

Groundwater analytical data from the current sampling event are included below in Table B. Current and historic groundwater analytical data are included in Table 2 and copies of the laboratory analytical reports for this reporting period are included as Attachment 3.

Table B: Analytical Results for May 4, 2005												
WELL	TPHg ($\mu\text{g/L}$)	TPHd ($\mu\text{g/L}$)	TPHmo ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethylbenzene ($\mu\text{g/L}$)	Total Xylenes ($\mu\text{g/L}$)	Oil & Grease (mg/L)				
MW1					DTW Only							
MW2					DTW Only							
MW3					Destroyed							
MW4	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50				

EVALUATION OF GROUNDWATER ANALYTICAL RESULTS

Monitoring well MW4, installed in December 2004 as a replacement for monitoring well MW3, reported non-detectable concentrations for the previous and current sampling events.

As requested by the HCDEH in correspondence dated March 11, 2005, a groundwater sample from monitoring well MW4 was tested for oil and grease. The results presented from the laboratory indicated that oil and grease was not detected in monitoring well MW4. Due to the lack of analyte detections, and with the HCDEH concurrence, monitoring wells MW1 and MW2 have been removed from the sampling protocol. Analyte concentrations in groundwater are presented in Figure 4.

RECOMMENDATIONS

- The next sampling event is scheduled for July 2005.
- Laboratory results from monitoring well MW4 support the conclusions that the November 2004 excavation was successful in extracting the remaining vertical and lateral extent of the petroleum hydrocarbon contaminated soil mass. LACO requests that the HCDEH issue a "No Further Action" status so that our client, Jim Ely, can receive regulatory closure.
- LACO is currently preparing a closure report for this site.

LIST OF FIGURES, TABLES, AND ATTACHMENTS

Figure 1: Location Map
Figure 2: Site Map
Figure 3: Hydraulic Gradient Map
Figure 4: Analyte Concentrations in Groundwater Map

Table 1: Historic Hydraulic Gradient Data
Table 2: Historic Analytical Results and Groundwater Data

Attachment 1: Key to Abbreviations
Attachment 2: Groundwater Sampling Field Data Sheets
Attachment 3: Laboratory Analytical Reports



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PROJECT GROUNDWATER MONITORING REPORT

by RJM

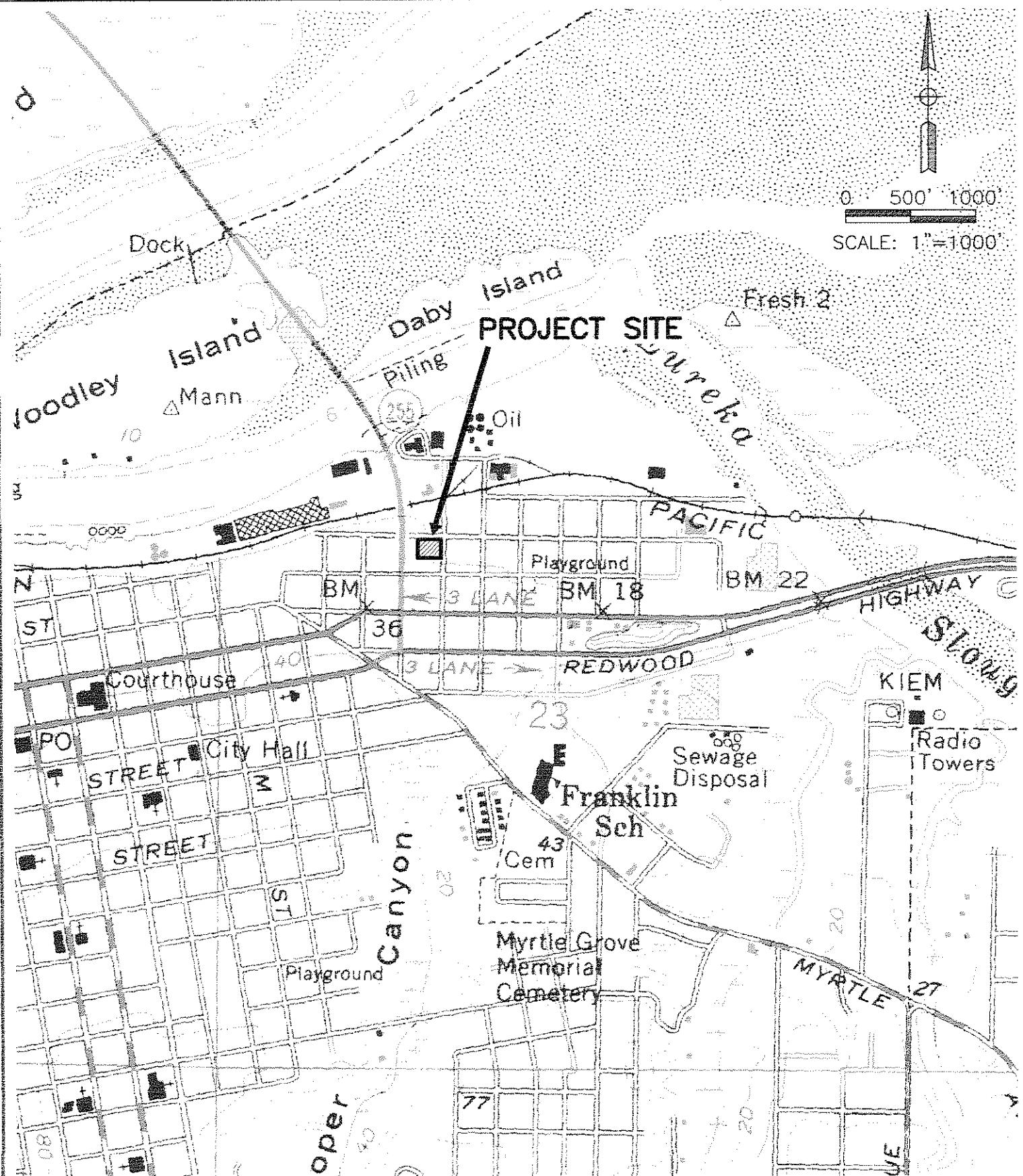
FIGURE

DATE 5/23/05

CHECK

JOB NO

4731.01



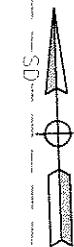


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PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
CLIENT	VARSITY ICE CREAM	DATE	5/23/05	2
LOCATION	1732 2nd STREET	CHECK		JOB NO.
	SITE MAP	SCALE	1"=20'	4731.01

GAS

2ND STREET

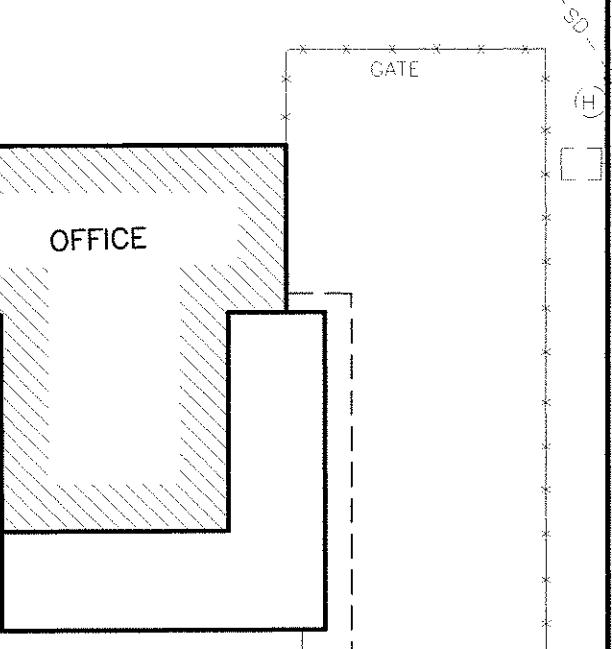


FREEZER

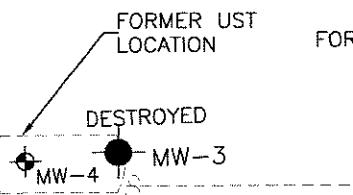
GARAGE

MW-1

OFFICE



MW-2



FORMER UST
LOCATION

DESTROYED

MW-3

MW-4

FORMER DISPENSER
LOCATION

GATE

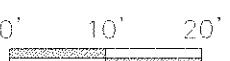
ALLEY

SEWER

LEGEND

- MONITORING WELL - JANUARY 2001
- MONITORING WELL - DECEMBER 2004
- MONITORING WELL DESTROYED
- - - FUEL LINES
- * * * * * FENCE LINE

SEWER FLOW DIRECTION

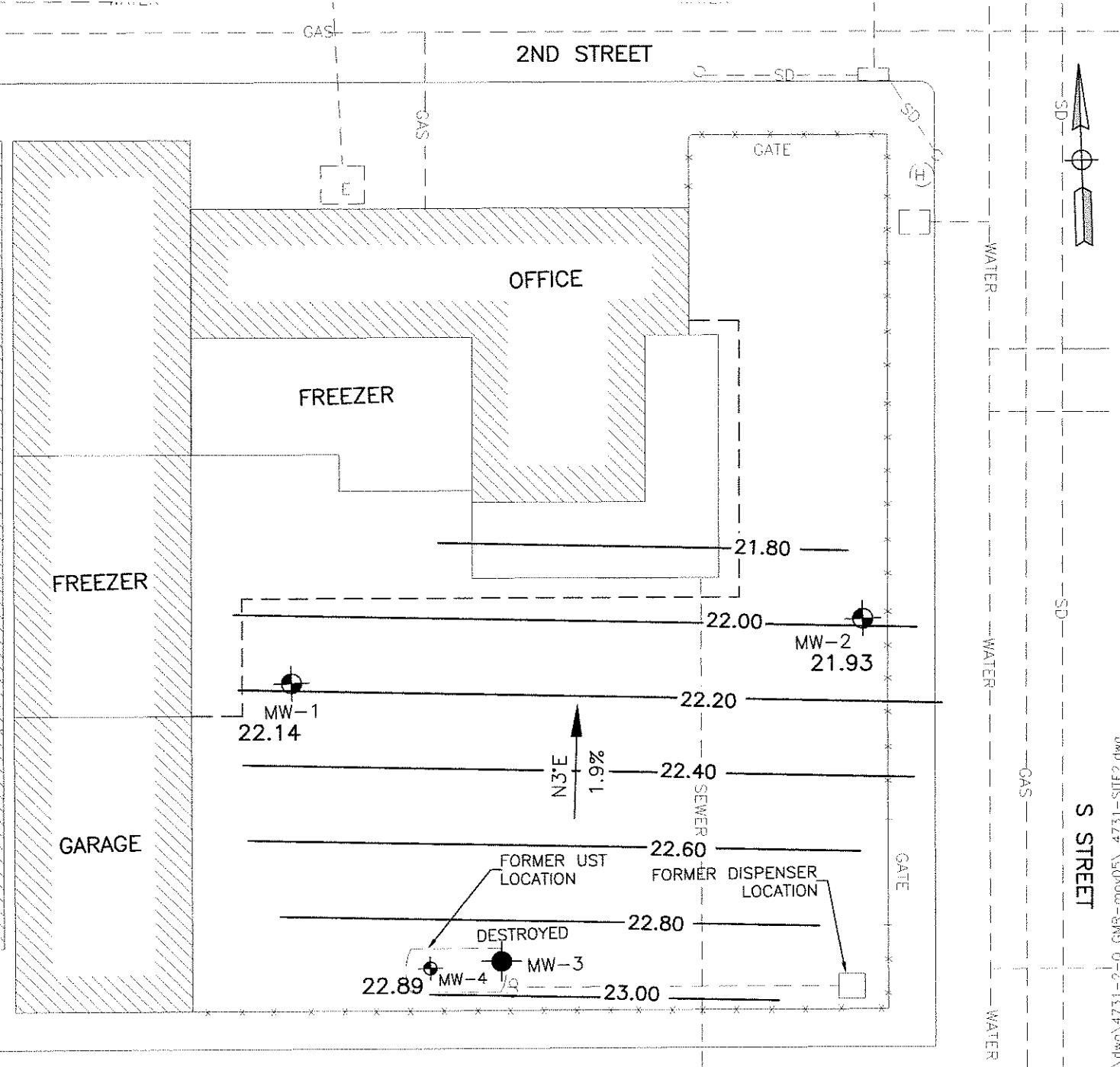


SCALE: 1"=20'



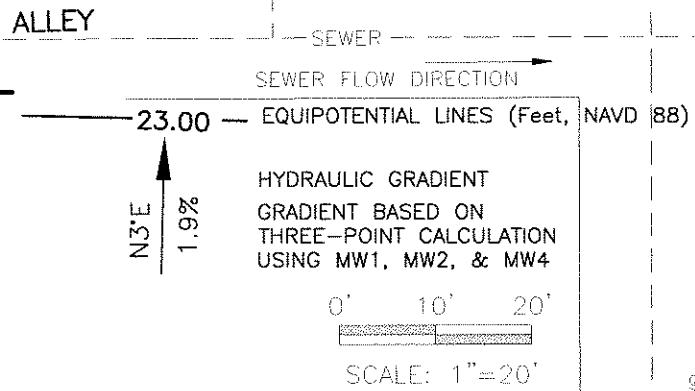
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PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
CLIENT	VARSITY ICE CREAM	DATE	5/23/05	3
LOCATION	1732 2nd STREET	CHECK		JOB NO.
	HYDRAULIC GRADIENT MAP (5/04/05)	SCALE	1"=20'	4731.01



LEGEND

- MONITORING WELL – JANUARY 2001
- MONITORING WELL – DECEMBER 2004
- MONITORING WELL DESTROYED
- FUEL LINES
- FENCE LINE



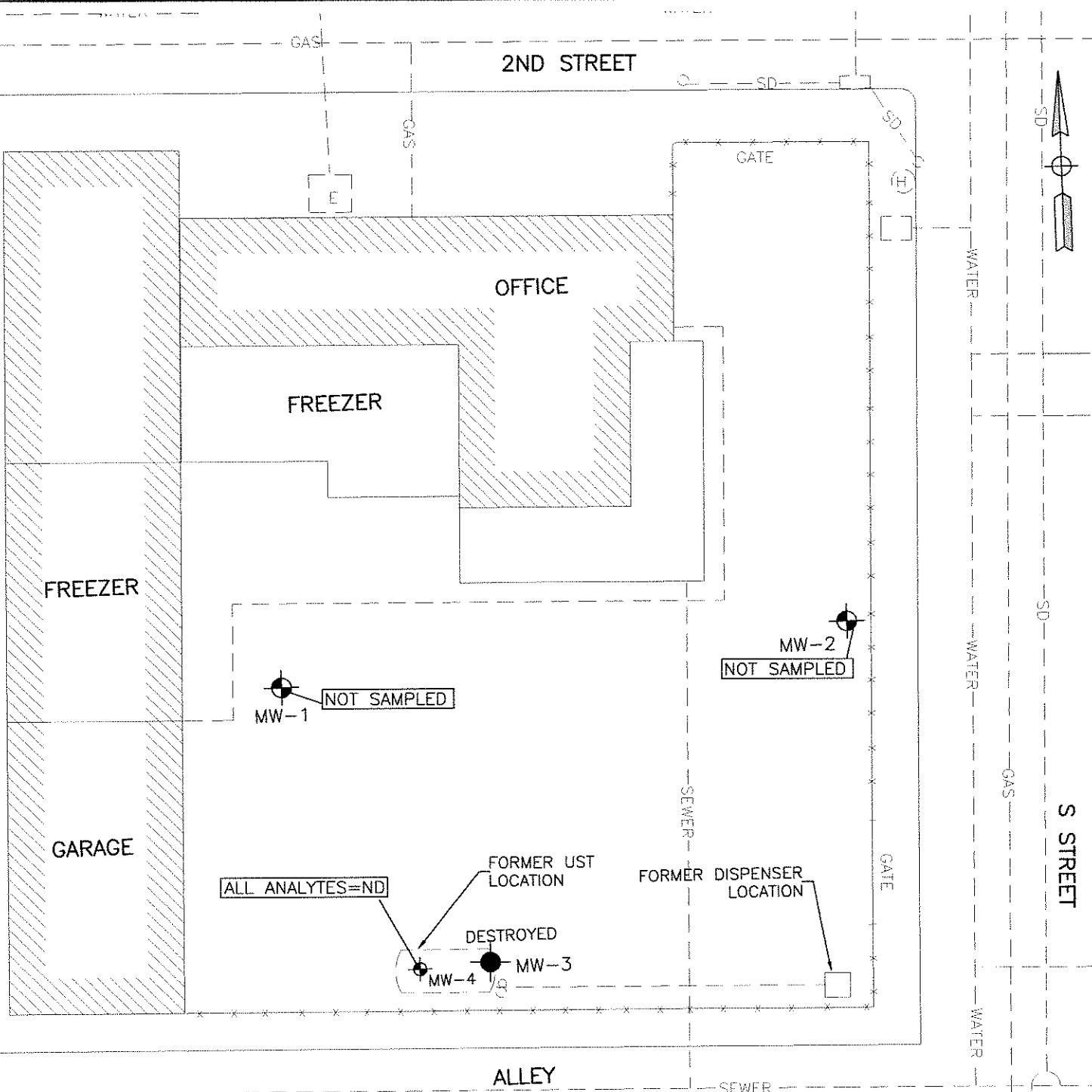


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PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM
CLIENT	VARSITY ICE CREAM	DATE	5/23/05
LOCATION	1732 2nd STREET	CHECK	
	ANALYTE CONCENTRATIONS IN GROUNDWATER (5/04/05)	SCALE	1"=20'

FIGURE

4



LEGEND

SEWER FLOW DIRECTION

- MONITORING WELL – JANUARY 2001
 - MONITORING WELL – DECEMBER 2004
 - MONITORING WELL DESTROYED
 - FUEL LINES
 - FENCE LINE
- ALL RESULTS REPORTED IN
MICROGRAMS PER LITER ($\mu\text{g}/\text{L}$)
- ND BELOW DETECTION LIMITS
- 0' 10' 20'
- SCALE: 1"=20'

TABLE 1: HISTORIC HYDRAULIC GRADIENTS

Jim Ely/Varsity Ice Cream; LACO Project No. 4731.00

LOP No. 12688

Groundwater Gradient			
Date	Technician	Direction	Slope
2/14/2001	DBM	N6W	0.10%
2/22/2001	DBM	N6W	0.30%
3/13/2001	DBM	N6W	0.10%
5/17/2001	DBM	N6W	1.70%
8/24/2001	DBM	N7W	1.50%
9/19/2001	DBM	N16W	1.61%
10/18/2001	DBM	N19W	1.85%
11/30/2001	MCR	N15W	2.24%
12/7/2001	MCR	N29W	3.55%
1/22/2002	MCR	N30W	3.67%
2/25/2002	MCR	N3E	1.69%
5/16/2002	DBM	N9E	1.80%
8/20/2002	JES	S73W	3.71%
12/18/2002	JES	N45W	2.46%
2/24/2003	JES	N3E	1.60%
5/8/2003	MJG	N	1.64%
8/13/2003	MJG	N5E	1.69%
11/14/2003	MJG	N2E	1.48%
2/12/2004	MJG	N5W	1.50%
8/9/2004	SJD	Insufficient Data	
2/7/2005	SJD	N3E	1.9%
5/4/2005	SJD	N3E	1.9%

Well head elevation are based on a bench mark; PID #LV0559 from National Geodetic Survey (NGS) data and established under supervision of a licensed surveyor.

TABLE 2: MONITORING WELL DATA AND LABORATORY ANALYTICAL RESULTS
 Jim Ely/Varsity Ice Cream; LACO Project No. 4731.00
 LOP No. 12688

WELL ID Date	Well Head Elevation (feet, NAVD88)	Depth to Water (feet, NAVD88)	Elevation (feet, NAVD88)	TPHg ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethylbenzene ($\mu\text{g/L}$)	Total Xylenes ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)	Oil and Grease
2/14/2001	7.18	22.28	—	—	—	—	—	—	—	—
2/22/2001	6.75	22.71	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <10
3/13/2001	7.62	21.84	—	—	—	—	—	—	—	—
5/17/2001	8.38	21.08	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <10
8/24/2001	9.40	20.06	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.0	ND <10
9/19/2001	9.79	19.67	—	—	—	—	—	—	—	—
10/18/2001	10.19	19.27	—	—	—	—	—	—	—	—
11/30/2001	7.26	22.20	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.0	ND <0.010
12/7/2001	7.02	22.44	—	—	—	—	—	—	—	—
1/22/2002	6.58	22.88	—	—	—	—	—	—	—	—
2/25/2002	5.68	23.78	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.0	ND <10
5/16/2002	8.06	21.40	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.0	ND <10
8/20/2002	9.27	20.19	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.0	ND <10
12/18/2002	6.59	22.87	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.0	ND <10
2/24/2003	6.45	23.01	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.0	ND <10
5/8/2003	6.07	23.39	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.0	ND <10
8/13/2003	9.10	20.36	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.0	ND <10
11/14/2003	9.33	20.13	—	—	—	—	—	—	—	—
2/12/2004	6.65	22.81	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.0	ND <10
8/9/2004	9.38	20.08	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.0	ND <10
2/7/2005	7.28	22.18	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.0	ND <10
5/4/2005	7.32	22.14	—	—	—	—	—	—	—	—

TABLE 2: MONITORING WELL DATA AND LABORATORY ANALYTICAL RESULTS
 Jim Ely/Varsity Ice Cream; LACO Project No. 4731.00
 LOP No. 12668

WELL ID	Date	Well Head Elevation (feet, NAVD88)	Depth to Water (feet, NAVD88)	Elevation (feet, NAVD88)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Oil and Grease
2/14/2001		6.61	22.22	---	---	---	---	---	---	---	---
2/22/2001		6.29	22.54	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<10
3/13/2001		7.22	21.61	---	---	---	---	---	---	---	---
5/17/2001		8.19	20.64	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<10
8/24/2001		8.86	19.97	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<10
9/19/2001		9.05	19.78	---	---	---	---	---	---	---	---
10/18/2001		9.36	19.47	---	---	---	---	---	---	---	---
11/30/2001		6.50	22.33	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.59	ND<1.0	ND<0.010
12/7/2001		5.53	23.30	---	---	---	---	---	---	---	---
1/22/2002		4.99	23.84	---	---	---	---	---	---	---	---
2/25/2002		5.36	23.47	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10
5/16/2002		7.92	20.91	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
8/20/2002		5.75	23.08	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
12/18/2002		4.88	23.95	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
2/24/2003		6.11	22.72	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
5/8/2003		5.69	23.14	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
8/13/2003		8.83	20.00	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
11/14/2003		8.95	19.88	---	---	---	---	---	---	---	---
2/12/2004		6.25	22.58	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
8/9/2004		9.14	19.69	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
2/7/2005		6.85	21.98	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
5/4/2005		6.90	21.93	---	---	---	---	---	---	---	---

TABLE 2: MONITORING WELL DATA AND LABORATORY ANALYTICAL RESULTS
 Jim Ely/Varsity Ice Cream; LACO Project No. 4731.00
 LOP No. 126688

WELL ID	Date	Well Head Elevation (feet, NAVD88)	Depth to Water (feet, NAVD88)	Elevation (feet, NAVD88)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L.)	Ethylbenzene (µg/L.)	Total Xylenes (µg/L.)	MTBE (µg/L)	Oil and Grease
MW3	29.67										
2/14/2001		6.99	22.68	—	—	—	—	—	—	—	—
2/22/2001		5.85	23.82	5,700	ND<5.0	81	51	420	ND<5.0	ND<10	—
3/13/2001		7.37	22.30	—	—	—	—	—	—	—	—
5/17/2001		8.02	21.65	25,000	33	1,300	520	4,300	ND<13	18	ND<10
8/24/2001		8.99	20.68	20,000	18	730	410	3,600	ND<1.0	—	—
9/19/2001		9.30	20.37	—	—	—	—	—	—	—	—
10/18/2001		9.58	20.09	—	—	—	—	—	—	—	—
11/30/2001		6.50	23.17	8,600	2.1	48	36	303	ND<1.0	ND<0.010	—
12/7/2001		5.59	24.08	—	—	—	—	—	—	—	—
1/22/2002		5.09	24.58	—	—	—	—	—	—	—	—
2/25/2002		5.28	24.39	4,100	0.69	11	19	67	ND<1.0	ND<10	—
5/16/2002		7.69	21.98	11,000	27	450	230	850	ND<1.0	—	—
8/20/2002		8.90	20.77	19,000	30	920	360	2,200	ND<5.0	—	—
12/18/2002		5.66	24.01	7,500	2.8	66	62	370	ND<5.0	—	—
2/24/2003		6.09	23.58	6,500	1.3	39	53	234	ND<1.0	—	—
5/8/2003		5.67	24.00	4,900	ND<0.50	12	23	70	ND<1.0	—	—
8/13/2003		8.72	20.95	11,000	23	450	200	940	ND<1.0	—	—
11/14/2003		9.00	20.67	15,000	10	290	210	970	ND<1.0	—	—
2/12/2004		6.07	23.60	5,700	1.3	20	39	129	ND<1.0	—	—
3/3/2004				Destroyed							

TABLE 2: MONITORING WELL DATA AND LABORATORY ANALYTICAL RESULTS
 Jim Ely/Varsity Ice Cream; LACO Project No. 4731.00
 LOP No. 12688

WELL ID Date	Well Head Elevation (feet, NAVD88)	Depth to Water (feet, NAVD88)	Elevation (feet, NAVD88)	TPHg ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethylbenzene ($\mu\text{g/L}$)	Total Xylenes ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)	Oil and Grease
MW4	30.09									
2/7/2005		7.16	22.93	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
5/4/2005		7.20	22.89	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50

Travel Blank

11/30/2001	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
2/25/2002	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
5/16/2002	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
8/20/2002	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
12/18/2002	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
2/24/2003	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
5/8/2003	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
8/13/2003	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
11/14/2003	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
2/12/2004	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
8/9/2004	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---

NOTES:

Bold results indicate analyte detection

The reported xylenes concentrations are a total of m,p-xylene and o-xylene.

Groundwater elevation calculated by: Well elevation - Depth to groundwater.

ND = not detected at or above the method detection limit shown.

--- = not analyzed or available.

$\mu\text{g/L}$ = micrograms per liter

TPHg = total petroleum hydrocarbons as gasoline

MTBE = Methyl tert-butyl ether

Attachment 1

KEY TO ABBREVIATIONS

Varsity Ice Cream, 1732 Second St. Eureka, CA

LACO No. 4731.01; LOP No. 12688

KEY TO ABBREVIATIONS	
Alk	-- Alkalinity
BTEX	-- Benzene; Toluene; Ethylbenzene; m,p- and o- Xylenes
CO ₂	-- Carbon dioxide
COC	-- Chain of Custody or Contaminants of Concern
Cr	-- Chromium
DHP	-- Down-hole-pump (submersible pump)
DIPE	-- Di-isopropyl Ether
Dis	-- Dissolved
DO	-- Dissolved Oxygen
DTW	-- Depth-to-Water
ECw	-- Electrical Conductivity in water
ETBE	-- Ethyl Tertiary Butyl Ether
Fe	-- Iron
FP	-- Free Product
Mn	-- Manganese
MTBE	-- Methyl Tertiary Butyl Ether
N	-- Nitrogen
N/A	-- Not Applicable
NCRWQCB	-- North Coast Regional Water Quality Control Board
ND<50	-- non-detect at reporting limits shown
NS	-- Not Sampled
NO ₃	-- Nitrate
NOT	Sample not analyzed for parameter
ACTIVE	-- during current sampling event
ORP	-- Oxidation Reduction Potential
P	-- Phosphorous
PCP/TCP	-- penta- tetra- tri- chlorophenols
pH	-- Potential of hydrogen
SGC	-- Silica gel cleanup
SO ₄	-- Sulfate
T	-- Temperature
T&P	-- Tape and Paste
TAME	-- Tertiary Amyl Methyl Ether
TBA	-- Tertiary Butyl Alcohol
TBF	-- Tertiary Butyl Formate
TIC	-- Total Inorganic Carbon
TOC	-- Total Organic Carbon
Tot	-- Total
TPHd	-- Total Petroleum Hydrocarbons as Diesel
TPHg	-- Total Petroleum Hydrocarbons as Gasoline
TPHk	-- Total Petroleum Hydrocarbons as Kerosene
TPHmo	-- Total Petroleum Hydrocarbons as Motor Oil
TPHs	-- Total Petroleum Hydrocarbons as Solvent
WQO	-- Water Quality Objective
µg/L	-- Micro grams per liter (parts per billion)

NOTE: Not all abbreviations used in this key are in this report.

Attachment 2



LAGO ASSOCIATES
CONSULTING ENGINEERS

21 West Fourth Street, Eureka, CA 95501

TEL 707.443.5054

FAX 707.443.0553

Page 1 of 1

CPW

Project

Name: **Varsity Ice Cream**

Tech: **SJD**

Project No.: **4731.01**

Mob/Demob time: **.25/.25**

Date: **5-4-05**

Travel time: **.25**

Golbal ID No.: **T0602300487**

Time on site: **10:00**

PM: **TDN**

Time off site: **11:30**

Mileage: **4**

WELL No.:	MW1	MW2	MW4					
DIAMETER (in)	2.00	2.00	2.00					
SCREENED INTERVAL (ft)	5 - 15	5 - 15	5 - 15					
DEPTH TO WATER (ft)	7.32	6.90	7.20					
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
pH								
TEMP (°C)								
Ecw (μmhos)								
ORP (mV)					82	-2		
DO (mg/L)					1.05	0.24		
OTHER (units)								
FIELD INTRINSICS								
TIME				10:30	10:42			
METHOD (DHP/CB/B)					DHP			
RATE (Lpm)					0.20			
VOLUME (L)					2.40			
COLOR				Cloudy	Cloudy			
ODOR					MED. SULFUR			
INTAKE DEPTH (FEET)					10.0			
PURGE								
SAMPLE	TIME			10:44				
	METHOD (DHP/CB/B)			DHP				
	ANALYTES	DTW ONLY	DTW ONLY	8260 List 4; Dis. Oil/Grease EPA 1664				
	TOTAL DRAWDOWN (FEET)			0.03				
	REMARKS			FD = mB Dis. O/G = FF				
WELL CONDITION	good	good	good					
WASTE DRUMS								

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED

REVISED:5/2/2005

Project Name:

VARSITY ICE CREAM
473 L. O. I.

Project No.: 4731.01

Tech: SJD
Date: 5-4-06

WELL ID:

WELL ID:

WELL ID:

WELL ID:



LACO ASSOCIATES

CONSULTING ENGINEERS.

21 West Fourth Street, Eureka, CA 95501
TEL 707.443.5054
FAX 707.443.0553

Project Name:

VARSITY ICE CREAM

Tech:

53

FAX 707.443.0553

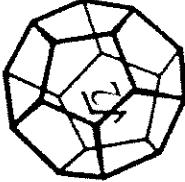
Project No.:

4731.01

Date: 5-4-05

**NORTH COAST
LABORATORIES LTD.**

5680 West End Road • Arcata • CA 95521-9202
707.822.3618 fax 707.822.3617



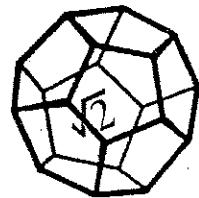
Chain of Custody

Attention: <u>Jim Ely</u>	Results & Invoice to: <u>Varsity Ice Cream</u>
Address: <u>PO Box 56</u>	Copies of Report to: <u>LACO ASSOCIATES: Tim Nelson</u>
Phone: _____	Sampler (Sign & Print): <u></u>
PROJECT INFORMATION	
Project Number: <u>4731.01</u>	Project Name: <u>Varsity Ice Cream</u>
Purchase Order Number: <u>TASK 3023</u>	

LABORATORY NUMBER:			
TAT: <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 5 Day <input type="checkbox"/> 5-7 Day	STD (2-3 Wk) <input type="checkbox"/> Other: _____	PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES	
REPORTING REQUIREMENTS:		State Forms <input type="checkbox"/>	
Preliminary: <input checked="" type="checkbox"/> Verbal <input type="checkbox"/> FAX <input type="checkbox"/> Email	By: _____	Final Report: <input type="checkbox"/> Verbal <input type="checkbox"/> FAX <input type="checkbox"/> Email	By: _____
CONTAINER CODES: 1— $\frac{1}{2}$ gal. pt; 2—250 ml pt; 3—500 ml pt; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other			
PRESERVATIVE CODES: a—HNO ₃ ; b—HCl; c—H ₂ SO ₄ ; d—Na ₂ S ₂ O ₃ ; e—NaOH; f—C ₂ H ₅ O ₂ Cl; g—other			
SAMPLE CONDITION/SPECIAL INSTRUCTIONS:			
GEOTRACKER			
D.s.	Oil/Grease	=	FF
SAMPLE DISPOSAL			
<input checked="" type="checkbox"/> NCL Disposal of Non-Contaminated		<input type="checkbox"/> Pickup	
<input type="checkbox"/> Return			
CHAIN OF CUSTODY SEALS Y/N/NA			
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand			

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

Attachment 3



NORTH COAST
LABORATORIES LTD.

May 13, 2005

Pvt. cust. paying on pickup

RECEIVED
LACO ASSOCIATES
MAY 16 2005
BY: <i>JG</i>

Order No.: 0505147

Invoice No.: 50076

PO No.: TASK 3023

ELAP No. 1247-Expires July 2006

Attn: Jim Ely-Varsity Ice Cream

DRG

RE: 4731.01, Varsity Ice Cream

TDN

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	4731-MW4-W
02A	4731-QCTB-W
03A	4731-QCMB-W
04A	4731-QCFD-W

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Laboratory Supervisor(s)

QA Unit

Jesse G. Chaney, Jr.
Laboratory Director

Date: 13-May-05
WorkOrder: 0505147

ANALYTICAL REPORT

Client Sample ID: 4731-MW4-W
Lab ID: 0505147-01A

Received: 5/5/05

Collected: 5/4/05 0:00

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		5/11/05
Benzene	ND	0.50	µg/L	1.0		5/11/05
Toluene	ND	0.50	µg/L	1.0		5/11/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/11/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/11/05
o-Xylene	ND	0.50	µg/L	1.0		5/11/05
Surrogate: 1,4-Dichlorobenzene-d4	82.8	80.8-139	% Rec	1.0		5/11/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	ND	50	µg/L	1.0		5/11/05

Client Sample ID: 4731-QCTB-W

Received: 5/5/05

Collected: 5/4/05 0:00

Lab ID: 0505147-02A

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		5/11/05
Benzene	ND	0.50	µg/L	1.0		5/11/05
Toluene	ND	0.50	µg/L	1.0		5/11/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/11/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/11/05
o-Xylene	ND	0.50	µg/L	1.0		5/11/05
Surrogate: 1,4-Dichlorobenzene-d4	82.3	80.8-139	% Rec	1.0		5/11/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	ND	50	µg/L	1.0		5/11/05

Date: 13-May-05
WorkOrder: 0505147

ANALYTICAL REPORT

Client Sample ID: 4731-QCMB-W
Lab ID: 0505147-03A

Received: 5/5/05

Collected: 5/4/05 0:00

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		5/11/05
Benzene	ND	0.50	µg/L	1.0		5/11/05
Toluene	ND	0.50	µg/L	1.0		5/11/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/11/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/11/05
o-Xylene	ND	0.50	µg/L	1.0		5/11/05
Surrogate: 1,4-Dichlorobenzene-d4	81.1	80.8-139	% Rec	1.0		5/11/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	50	µg/L	1.0		5/11/05

Client Sample ID: 4731-QCFD-W

Received: 5/5/05

Collected: 5/4/05 0:00

Lab ID: 0505147-04A

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		5/11/05
Benzene	ND	0.50	µg/L	1.0		5/11/05
Toluene	ND	0.50	µg/L	1.0		5/11/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/11/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/11/05
o-Xylene	ND	0.50	µg/L	1.0		5/11/05
Surrogate: 1,4-Dichlorobenzene-d4	82.3	80.8-139	% Rec	1.0		5/11/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	50	µg/L	1.0		5/11/05

North Coast Laboratories, Ltd.

Date: 13-May-05

CLIENT: Pvt cust. paying on pickup
 Work Order: 0505147
 Project: 4731.01, Varsity Ice Cream

QC SUMMARY REPORT
 Method Blank

Sample ID	MB-5/11/05	Batch ID:	R34835	Test Code:	8260OXYW	Units:	µg/L	Analysis Date:	5/11/05 6:57:00 AM	Prep Date		
Client ID:		Run ID:		ORGCMS3_	050511B			SeqNo:	504448			
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.0										
Benzene	ND	0.50										J
Toluene	0.2393	0.50										J
Ethylbenzene	0.1401	0.50										J
m,p-Xylene	0.2804	0.50										J
o-Xylene	0.1735	0.50										
1,4-Dichlorobenzene-d4	0.818	0.10	1.00	0		81.9%			81	139	0	
Sample ID	MB-5/11/05	Batch ID:	R34833	Test Code:	GASW-MS	Units:	µg/L	Analysis Date:	5/11/05 6:57:00 AM	Prep Date		
Client ID:		Run ID:		ORGCMS3_	050511A			SeqNo:	504430			
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	ND	50										

Qualifiers:

ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

North Coast Laboratories, Ltd.

Date: 13-May-05

CLIENT: Pvt. cust. paying on pickup
Work Order: 0505147
Project: 4731.01, Varsity Ice Cream

QC SUMMARY REPORT
Laboratory Control Spike

Sample ID	LCS-05315	Batch ID:	R34835	Test Code:	8260OXYW	Units: $\mu\text{g/L}$	Analysis Date 5/11/05 3:33:00 AM			Prep Date	
Client ID:		Run ID:	ORGCMS3_050511B	SeqNo:	504445						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
Methyl tert-butyl ether (MTBE)	19.71	1.0	20.0	0	98.5%	80	120	0	0	0	
Benzene	19.59	0.50	20.0	0	97.9%	78	117	0	0	0	
Toluene	19.13	0.50	20.0	0	95.6%	80	120	0	0	0	
Ethylbenzene	20.58	0.50	20.0	0	103%	80	120	0	0	0	
m,p-Xylene	41.21	0.50	40.0	0	103%	80	120	0	0	0	
c,Xylene	23.01	0.50	20.0	0	115%	80	120	0	0	0	
1,4-Dichlorobenzene-d4	0.888	0.10	1.00	0	88.8%	81	139	0	0	0	

Sample ID	LCS-05315	Batch ID:	R34835	Test Code:	8260OXYW	Units: $\mu\text{g/L}$	Analysis Date 5/11/05 3:53:00 AM			Prep Date	
Client ID:		Run ID:	ORGCMS3_050511B	SeqNo:	504446						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
Methyl tert-butyl ether (MTBE)	19.43	1.0	20.0	0	97.1%	80	120	19.7	1.41%	20	
Benzene	19.38	0.50	20.0	0	96.9%	78	117	19.6	1.08%	20	
Toluene	18.70	0.50	20.0	0	93.5%	80	120	19.1	2.26%	20	
Ethylbenzene	20.42	0.50	20.0	0	102%	80	120	20.6	0.761%	20	
m,p-Xylene	40.63	0.50	40.0	0	102%	80	120	41.2	1.42%	20	
c,Xylene	22.97	0.50	20.0	0	115%	80	120	23.0	0.174%	20	
1,4-Dichlorobenzene-d4	0.890	0.10	1.00	0	89.0%	81	139	0.888	0.205%	20	

Sample ID	LCS-05316	Batch ID:	R34833	Test Code:	GASW-MS	Units: $\mu\text{g/L}$	Analysis Date 5/11/05 5:15:00 AM			Prep Date	
Client ID:		Run ID:	ORGCMS3_050511A	SeqNo:	504427						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
TPHC Gasoline	996.2	50	1,000	0	99.6%	80	120	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Pvt. cust. paying on pickup
Work Order: 0505147
Project: 4731.01, Varsity Ice Cream

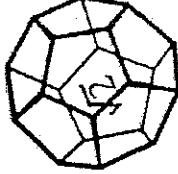
QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID	LCSD-05316	Batch ID:	R34833	Test Code:	GASW-MS	Units:	µg/L	Analysis Date	5/11/05 5:41:00 AM	Prep Date		
Client ID:		Run ID:	ORGCMS3_050511A	SeqNo:	504428							
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TPHC Gasoline	-	984.4	50	1,000	0	98.4%	80	120	996	1.19%	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank



**NORTH COAST
LABORATORIES LTD.**

5680 West End Road • Arcata • CA 95521-9202
707-822-4649 Fax 707-822-6831

Chain of Custody

Attention: <u>Jim Ely</u>		Results & Invoice to: <u>Varsity Ice Cream</u>		Address: <u>PO Box 56</u>		Phone: <u></u>		Copies of Report to: <u>LACO ASSOCIATES: Tim Nelson</u>		Sampler (Sign & Print): <u>Steve Davis</u>		PROJECT INFORMATION		Project Number: <u>4731.01</u>		Project Name: <u>Varsity Ice Cream</u>		Purchase Order Number: <u>TASK 3023</u>			



alpha

Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

208 Mason St. Ukiah, California 95482

DRG
TDN 5-15-05

JUN 15 2005

B2H

je

26 May 2005

North Coast Labs, Inc.

Attn: Loretta or Laura

5680 West End Road

Arcata, CA 95521

RE: 0505147

Work Order: A505323

Enclosed are the results of analyses for samples received by the laboratory on 05/11/05 10:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nena M. Burgess For Sheri L. Speaks
Project Manager



alpha

Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

208 Mason St. Ukiah, California 95482

North Coast Labs, Inc.
5680 West End Road
Arcata, CA 95521
Attn: Loretta or Laura

Report Date: 05/26/05 10:32
Project No: 0505147
Project ID: 0505147

Order Number A505323	Receipt Date/Time 05/11/2005 10:00	Client Code NCL	Client PO/Reference
-------------------------	---------------------------------------	--------------------	---------------------

CHEMICAL EXAMINATION REPORT

Page 1 of 4

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
0505147-1D 4731-MW4-W (Dissolved)	A505323-01	Water	05/04/05 00:00	05/11/05 10:00

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Nena M. Burgess For Sheri L. Speaks
Project Manager

5/26/2005



alpha

Alpha Analytical Laboratories Inc.

208 Mason St. Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

CHEMICAL EXAMINATION REPORT

Page 2 of 4

North Coast Labs, Inc.
5680 West End Road
Arcata, CA 95521
Attn: Loretta or Laura

Report Date: 05/26/05 10:32
Project No: 0505147
Project ID: 0505147

Order Number	Receipt Date/Time	Client Code	Client PO/Reference
A505323	05/11/2005 10:00	NCL	

Alpha Analytical Laboratories, Inc.

METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE
0505147-1D 4731-MW4-W (Dissolved) (A505323-01)			Sample Type: Water		Sampled: 05/04/05 00:00		
Conventional Chemistry Parameters by APHA/EPA Methods							
Oil & Grease (HEM)	EPA 1664	AE52105	05/21/05	05/24/05	I	ND mg/l	5.0

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Nena M. Burgess For Sheri L. Speaks
Project Manager

5/26/2005



TM
alpha

Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

208 Mason St. Ukiah, California 95482

• Phone: (707) 468-0401 • Fax: (707) 468-5267

CHEMICAL EXAMINATION REPORT

Page 3 of 4

North Coast Labs, Inc.
5680 West End Road
Arcata, CA 95521
Attn: Loretta or Laura

Report Date: 05/26/05 10:32
Project No: 0505147
Project ID: 0505147

Order Number A505323	Receipt Date/Time 05/11/2005 10:00	Client Code NCL	Client PO/Reference
-------------------------	---------------------------------------	--------------------	---------------------

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AE52105 - General Preparation										
<u>Blank (AE52105-BLK1)</u> Prepared: 05/21/05 Analyzed: 05/24/05										
Oil & Grease (HEM)	ND	5.0	mg/l							
<u>LCS (AE52105-BS1)</u> Prepared: 05/21/05 Analyzed: 05/24/05										
Oil & Grease (HEM)	19.6	5.0	mg/l	20.0		98.0	78-114			
<u>LCS Dup (AE52105-BSD1)</u> Prepared: 05/21/05 Analyzed: 05/24/05										
Oil & Grease (HEM)	19.3	5.0	mg/l	20.0		96.5	78-114	1.54	18	
<u>Matrix Spike (AE52105-MS1)</u> Source: A505350-01 Prepared: 05/21/05 Analyzed: 05/24/05										
Oil & Grease (HEM)	11.7	5.0	mg/l	12.0	ND	84.2	78-114			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Nena M. Burgess For Sheri L. Speaks
Project Manager

5/26/2005



alpha

Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

208 Mason St. Ukiah, California 95482

CHEMICAL EXAMINATION REPORT

Page 4 of 4

North Coast Labs, Inc.
5680 West End Road
Arcata, CA 95521
Attn: Loretta or Laura

Report Date: 05/26/05 10:32
Project No: 0505147
Project ID: 0505147

Order Number	Receipt Date/Time	Client Code	Client PO/Reference
A505323	05/11/2005 10:00	NCL	

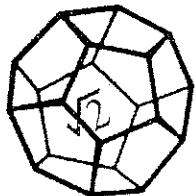
Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
PQL Practical Quantitation Limit

**Sub-Contract
Chain of Custody Record**

Date Shipped: 5/9/05 Carrier: ups

Air Bill #: _____ Cooler #: _____



3-4

**NORTH COAST
LABORATORIES LTD.**

Subcontractor: Alpha Analytical - Ukiah
860 Waugh Lane, H-1
Ukiah, CA 95482

Send Results to: North Coast Labs
5680 West End Road
Arcata, CA 95521
Attn: Loretta Tomlin
(707) 822-4649

Phone: (707) 468-0401
Attention Line: Karen Daly

5/9/05
200

Shari Speaks 5/10/05 10:00
88

Relinquished By: (signature)

Date/Time

Received By: (signature)

Date/Time

Relinquished By: (signature)

Date/Time

Received By: (signature)

Date/Time

Relinquished By: (signature)

Date/Time

Received By: (signature)

Date/Time

Analysis Request

NCL Sample #:	Sample ID:	Date Sampled:	Analysis / Matrix:
0505147-1D	4731-MW4-W (Dissolved)	5/4/05	Dissolved Oil & Grease

A505323-1

Please provide geotracker.
Log code = CAE
Proj. Name = 4731.01, Varsity Ice Cream
Global ID = 10602300487 field filtered then preserved

Special Instructions: Please include QC Data

RUN SAMPLE FOR OUR USUAL O&G, LOG SAMPLE ID AS DISSOLVED PER KELLY,

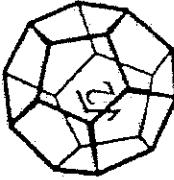
CM 5/10/05 10:30 AM

Date Due: 5/19/05

Rush Charges Authorized: NOPreservative: HCl

Return Chain of Custody to NCL

5680 West End Road • Arcata California 95521-9202 • 707-822-4649 • FAX 707-822-6831



NORTH COAST
LABORATORIES LTD.

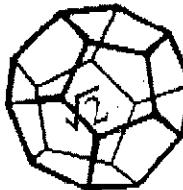
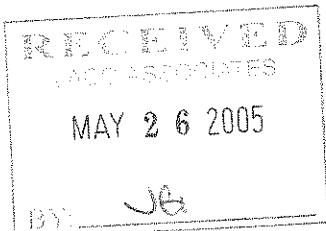
5580 West End Road • Arcata • CA 95521-9202
707-822-4649 Fax 707-822-6811

Chain of Custody

Attention: Jim Ely	<input type="checkbox"/> 24 Hr	<input type="checkbox"/> 48 Hr	<input type="checkbox"/> 5 Day	<input type="checkbox"/> 5-7 Day
Results & Invoice to: Varsity Ice Cream	<input checked="" type="checkbox"/> STD (2-3 Wk)			
Address: PO Box 56	<input type="checkbox"/> Other: _____			
Phone: _____				
Copies of Report to: LACO ASSOCIATES: Tim Nelson				
Sampler (Sign & Print): <u>Steve Davis</u>				
PROJECT INFORMATION				
Project Number: 4731.01				
Project Name: Varsity Ice Cream				
Purchase Order Number: TASK 30223				
ANALYSIS	8260 List 4	DISSOLVED OIL/Grease		
CONTAINER	PRESERVATIVE			
TAT: <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 5 Day <input type="checkbox"/> 5-7 Day				
<input checked="" type="checkbox"/> STD (2-3 Wk) <input type="checkbox"/> Other: _____				
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES				
REPORTING REQUIREMENTS: State Forms <input type="checkbox"/>				
Preliminary: FAX <input checked="" type="checkbox"/> Verbal <input type="checkbox"/> By: _____				
Final Report: FAX <input type="checkbox"/> Verbal <input type="checkbox"/> By: _____				
CONTAINER CODES: 1— $\frac{1}{2}$ gal. pt; 2—250 ml pt; 3—500 ml pt; 4—1 l Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 l BG; 8—1 l cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other				
PRESERVATIVE CODES: a—HNO ₃ ; b—HCl; c—H ₂ SO ₄ ; d—Na ₂ S ₂ O ₃ ; e—NaOH; f—C ₂ H ₅ O ₂ Cl; g—other				
SAMPLE CONDITION/SPECIAL INSTRUCTIONS				
GEOTRACKER				
DIS. OIL/GREASE = FF				
<i>Not intact</i>				
LAB ID	SAMPLE ID	DATE	TIME	MATRIX*
4731-MW4-W	5-4-05	AM	GW	3 1
4731-QCTB-W				1
4731-QCMB-W				3
4731-QCFD-W		↓	↓	3
REINFORCED BY (Sig & Print)	DATE/TIME	RECEIVED BY (Sig)	DATE/TIME	SAMPLE DISPOSAL
<u>Steve Davis</u>	6-5-05	<u>Steve Davis</u>	5/5/05	<input checked="" type="checkbox"/> NCL Disposal of Non-Contaminated <input type="checkbox"/> Return <input type="checkbox"/> Pickup
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand				
CHAIN OF CUSTODY SEALS Y/N/NA <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

URGENT
 PRIORITY
 ROUTINE



**NORTH COAST
LABORATORIES LTD.**

FACSIMILE TRANSMISSION

DATE

5/26/05

TO:
NAME: Jim Ely c/o Tim Nelson
LOCATION: Woolsey Ice Cream
ATTN: Jim Ely c/o Tim Nelson
FAX: 443-0553
PHONE: _____

FROM:
NAME: **NORTH COAST LABORATORIES**
LOCATION: **5680 WEST END RD**
ARCATA, CA 95521-9202
FROM: Humboldt
FAX: (707) 822-6831
PHONE: (707) 822-4649

Total number of pages including cover sheet 5

If you have any problems receiving this message,
please call our telephone number above.

INSTRUCTIONS/MESSAGE:

Here are the results from the outside lab. Thanks

IMPORTANT NOTE

The documents accompanying this transmission may contain information that is legally privileged and/or confidential. The information is intended only for the individual named above. If you are not the intended recipient, or a person responsible for delivering it, you are hereby notified that any disclosure, copying or distribution, or use of any of this transmission is **PROHIBITED**. If you have received this transmission in error, please notify us immediately by phone and mail the transmission to us. Thank you for your cooperation and help.

MAY-26-05 THU 12:15 PM ALPHA ANALYTICAL LABORATORY FAX NO. 11312

P. 02/08



Alpha Analytical Laboratories Inc.

208 Mason St, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

CHEMICAL EXAMINATION REPORT

Page 1 of 4

North Coast Labs, Inc.
5680 West End Road
Arcata, CA 95521
Attn: Loretta or Laura

Report Date: 05/26/05 10:32

Project No: 0505147

Project ID: 0505147

Order Number

A505323

Receipt Date/Time
05/11/2005 10:00Client Code
NCL

Client PO/Reference

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
0505147-1D 4731-MW4-W (Dissolved)	A505323-01	Water	05/04/05 00:00	05/11/05 10:00

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Nena M. Burgess For Sheri L. Speaks
Project Manager

5/26/2005



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5207

208 Mason St. Ukiah, California 95482

CHEMICAL EXAMINATION REPORT

Page 2 of 4

North Coast Labs, Inc.
5680 West End Road
Arcata, CA 95521
Attn: Loretta or Laura

Report Date: 05/26/05 10:32

Project No: 0505147

Project ID: 0505147

Order Number A505323	Receipt Date/Time 05/11/2005 10:00	Client Code NCL	Client PO/Reference
-------------------------	---------------------------------------	--------------------	---------------------

Alpha Analytical Laboratories, Inc.					
METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT
0505147-1D 4731-MW4-W (Dissolved) (A505323-01)	Sample Type: Water			Sampled: 05/04/05 00:00	
Conventional Chemistry Parameters by API/IA/EPA Methods					
Oil & Grease (HEM)	EPA 1664	AES2105	05/21/05	05/24/05	1 ND mg/l
					5.0

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Neja M. Burgess For Sheri L. Speaks
Project Manager

5/26/2005

MAY-26-05 THU 12:15 PM ALPHA ANALYTICAL LABORATORY FAX NO. 11312

P. 04/06



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

208 Mason St. Ukiah, California 95482

CHEMICAL EXAMINATION REPORT

Page 3 of 4

North Coast Labs, Inc.
5680 West End Road
Arcata, CA 95521
Attn: Loretta or Laura

Report Date: 05/26/05 10:32

Project No: 0505147

Project ID: 0505147

Order Number

A505323

Receipt Date/Time
05/11/2005 10:00Client Code
NCL

Client PO/Reference

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch A52105 - General Preparation										
Blank (A52105-BLK1) Oil & Grease (IbM)	ND	5.0	mg/l		Prepared: 05/21/05 Analyzed: 05/24/05					
LCS (A52105-B51) Oil & Grease (IbM)	19.6	5.0	mg/l	20.0	98.0	78-114				
LCS Dup (A52105-BSD1) Oil & Grease (IbM)	19.3	5.0	mg/l	20.0	96.5	78-114	1.54	18		
Matrix Spike (A52105-MS1) Oil & Grease (IbM)	11.7	5.0	mg/l	12.0	ND	84.2	78-114			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noqa M. Burgess Nor Sheri I. Speaks
Project Manager

5/26/2005



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0101 • Fax: (707) 468-5267

208 Mason St, Ukiah, California 95482

CHEMICAL EXAMINATION REPORT

Page 4 of 4

North Coast Labs, Inc.
5680 West End Road
Arcata, CA 95521
Attn: Loretta or Laura

Report Date: 05/26/05 10:32

Project No: 0505147

Project ID: 0505147

Order Number
AS05323Receipt Date/Time
05/11/2005 10:00Client Code
NCL

Client PO/Reference

Notes and Definitions

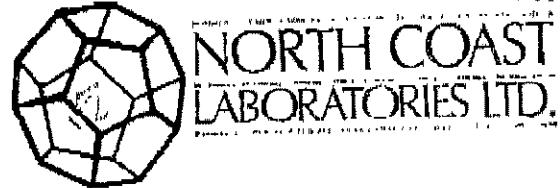
- DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
PQL Practical Quantitation Limit

MAY-26-05 THU 12:15 PM ALPHA ANALYTICAL LABORATORY FAX NO. 11312

P. 06/06

Page 1 of 1

Sub-Contract
Chain of Custody Record



Date Shipped: 5/9/05 Carrier: ups

Air Bill #: _____ Cooler #: _____

Subcontractor: Alpha Analytical - Ukiah
860 Waukh Lane, H-1
Ukiah, CA 95482Send Results to: North Coast Labs
5680 West End Road
Arcata, CA 95521
Attn: Loretta Tomlin
(707) 822-4649

Phone: (707) 468-0401

Attention Line: Karen Daly

Relinquished By: (signature)

Date/Time

Received By: (signature)

Date/Time

Relinquished By: (signature)

Date/Time

Received By: (signature)

Date/Time

Relinquished By: (signature)

Date/Time

Received By: (signature)

Date/Time

Analysis RequestNCL Sample #: 0505147-1Q Sample ID: A731MW4-W (Dissolved) Date Sampled: 5/4/05Analysis / Matrix:
Dissolved Oil & GreaseA505323-1

Please provide geotracker.
 Log code = CAG
 Proj. Name = 4731.01, Varsity Ice Cream
 Global ID = T06Q2300487 field filtered then preserved

Special Instructions: Please include QC Data.
 RUN SAMPLE FOR OUR USUAL O/S/G, LOG SAMPLE ID AS DISSOLVED PER KELLY,

*On 5/11/05 10:30 am*Date Due: 5/19/05

Rush Charges Authorized:

NO

Preservative:

HCl

Return Chain of Custody to NCL